#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau



### 

## (43) International Publication Date 24 March 2005 (24.03.2005)

#### **PCT**

# (10) International Publication Number WO 2005/027008 A1

(51) International Patent Classification<sup>7</sup>:

G06F 17/60

(21) International Application Number:

PCT/US2004/003438

- (22) International Filing Date: 6 February 2004 (06.02.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

- (30) Priority Data:
  - 60/502,025

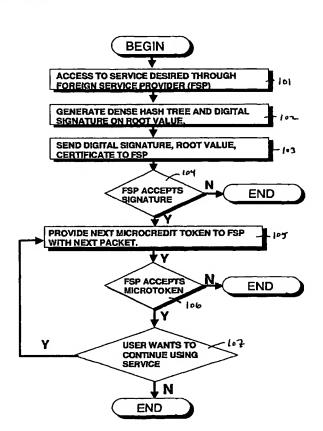
10 September 2003 (10.09.2003) U

- (71) Applicant (for all designated States except US): DO-COMO COMMUNICATIONS LABORATORIES USA, INC. [US/US]; 181 Metro Drive, Suite 300, San Jose, CA 95110 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GENTRY, Craig. RAMZAN, Zulfikar.

- (74) Agents: MALLIE, Michael, J. et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 12400 Wilshire Boulevard, 7th Floor, Los Angeles, CA 90025 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR SECURE AND SMALL CREDITS FOR VERIFIABLE SERVICE PROVIDER METERING



(57) Abstract: A method and apparatus for obtaining access to services of service providers. In one embodiment, the method comprises requesting a desired service through a foreign service provider.(101), generating a hash tree and generating a digital signature on a root value of the hash tree (102), sending the digital signature and the root value to the foreign service provider (103), providing one or more tokens to the foreign service provider with the next packet if the foreign service provider accepts the signature (105) and continuing to use the service while the foreign service provider accepts token (107).



### WO 2005/027008 A1



GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

#### Published:

with international search report